

IN THE CLAIMS:

1 1. (CURRENTLY AMENDED) A method for modifying and testing a network protocol
2 stack that includes a plurality of protocols, the method comprising:

3 executing a test of said network protocol stack using a processing system, the test
4 modeling each protocol of said plurality of protocols of said protocol stack as separate
5 objects, the test simulating communication between a plurality of devices using said net-
6 work protocol stack;

7 receiving a command comprising code to modify one of ~~a~~ said plurality of proto-
8 cols in said ~~a~~ protocol stack ~~of said network protocol~~; and

9 performing said modification on said one of said plurality of protocols in said pro-
10 tocol stack while the test is executing, by changing said separate object corresponding to
11 said one of said plurality of protocols in said protocol stack.

1 2. (ORIGINAL) The method of claim 1 wherein said command is received in interpreted
2 code.

1 3. (CURRENTLY AMENDED) The method of claim 1 further comprising:

2 determining said one of said plurality of protocols in said protocol stack to modify
3 responsive to receiving said command.

1 4. (ORIGINAL) The method of claim 1 further comprising:

2 determining whether said command is adding a message to said one of said plu-
3 rality of protocols; and

4 adding said message to said one of said plurality of protocols.

1 5. (ORIGINAL) The method of claim 1 further comprising:

2 determining whether said command is to remove a message from said one of said
3 plurality of protocols; and
4 removing said message from said protocol.

1 6. (ORIGINAL) The method of claim 1 further comprising:

2 determining whether said command is to modify an existing message in said one
3 of said plurality of protocols;
4 removing said existing message from said one of said plurality of protocols; and
5 adding a new message to said one of said plurality of protocols including said ex-
6 isting message with modifications in said command.

1 7. (CURRENTLY AMENDED) The method of claim 1 further comprising:

2 determining whether said command is to modify a state machine of said one of
3 said plurality of protocols; and
4 modifying said state machine of said one of said plurality of protocols responsive
5 to said command.

1 8. (CURRENTLY AMENDED) An apparatus for modifying and testing a network proto-
2 col stack that includes a plurality of protocols, the apparatus comprising:

3 means for executing a test of said network protocol stack, the test modeling each
4 protocol of said plurality of protocols of said protocol stack as separate objects, the test
5 simulating communication between a plurality of devices using said network protocol
6 stack;

7 means for receiving a command comprising code to modify one ~~a~~ of said plurality
8 of protocols in ~~a said protocol stack of said network protocol~~; and

9 means for performing said modification on said one of said plurality of protocols
10 in said protocol stack while the test is executing, by changing said separate object corre-
11 sponding to said one of said plurality of protocols in said protocol stack.

1 9. (ORIGINAL) The apparatus of claim 8 wherein said command is received in inter-
2 preted code.

1 10. (CURRENTLY AMENDED) The apparatus of claim 8 further comprising:

2 means for determining said one of said plurality of protocols in said protocol
3 stack to modify responsive to receiving said command.

1 11. (ORIGINAL) The apparatus of claim 8 further comprising:

2 means for determining whether said command is adding a message to said one of
3 said plurality of protocols;

4 means for adding said message to said one of said plurality of protocols.

1 12. (ORIGINAL) The apparatus of claim 8 further comprising:

2 means for determining whether said command is to remove a message from said
3 one of said plurality of protocols; and

4 means for removing said message from said protocol.

1 13. (ORIGINAL) The apparatus of claim 8 further comprising:

2 means for determining whether said command is to modify an existing message in
3 said one of said plurality of protocols;

4 means for removing said existing message from said one of said plurality of pro-
5 tocols; and

6 means for adding a new message to said one of said plurality of protocols includ-
7 ing said existing message with modifications in said command.

1 14. (CURRENTLY AMENDED) The apparatus of claim 8 further comprising:

2 means for determining whether said command is to modify a state machine of
3 said one of said plurality of protocols; and

4 means for modifying said state machine of said one of said plurality of protocols
5 responsive to said command.

1 15. (CURRENTLY AMENDED) A computer readable medium carrying one or more in-
2 structions for modifying and testing a network protocol stack that includes a plurality of
3 protocols, the one or more instructions including instructions which executed by one or
4 more processors, cause the one or more processors to perform ~~the method comprising:~~

5 executing a test of said network protocol stack, the test modeling each protocol of
6 said plurality of protocols of said protocol stack as separate objects, the test simulating
7 communication between a plurality of devices using said network protocol stack;

8 receiving a command comprising code to modify one of a said plurality of proto-
9 cols in said a protocol stack of said network protocol; and

10 performing said modification on said one of said plurality of protocols in said pro-
11 tol stack while the test is executing, by changing said separate object corresponding to
12 said one of said plurality of protocols in said protocol stack.

1 16. (ORIGINAL) The medium of claim 15 wherein said command is received in inter-
2 preted code.

1 17. (CURRENTLY AMENDED) The medium of claim 15 wherein said one or more in-
2 structions further include instructions which executed by one or more processors, cause
3 the one or more processors to perform~~method further comprises:~~

4 determining said one of said plurality of protocols in said protocol stack to modify
5 responsive to receiving said command.

1 18. (CURRENTLY AMENDED) The medium of claim 15 wherein said one or more in-
2 structions further include instructions which executed by one or more processors, cause
3 the one or more processors to perform~~method further comprises:~~

4 determining whether said command is adding a message to said one of said plu-
5 rality of protocols; and

6 adding said message to said one of said plurality of protocols.

1 19. (CURRENTLY AMENDED) The medium of claim 15 wherein said one or more in-
2 structions further include instructions which executed by one or more processors, cause
3 the one or more processors to perform~~method further comprises:~~

4 determining whether said command is to remove a message from said one of said
5 plurality of protocols; and

6 removing said message from said protocol.

1 20. (CURRENTLY AMENDED) The medium of claim 15 wherein said one or more in-
2 structions further include instructions which executed by one or more processors, cause
3 the one or more processors to perform~~method further comprises:~~

4 determining whether said command is to modify an existing message in said one
5 of said plurality of protocols;

6 removing said existing message from said one of said plurality of protocols; and

7 adding a new message to said one of said plurality of protocols including said ex-
8 isting message with modifications in said command.

1 21. (CURRENTLY AMENDED) The medium of claim 15 wherein said one or more in-
2 structions further include instructions which executed by one or more processors, cause
3 the one or more processors to perform~~method further comprises:~~

4 determining whether said command is to modify a state machine of said one of
5 said plurality of protocols; and

6 modifying said state machine of said one of said plurality of protocols responsive
7 to said command.

1 22. (CURRENTLY AMENDED) An apparatus for modifying and testing a network pro-
2 tocol stack that includes a plurality of protocols, the apparatus comprising:

3 a memory configured to store instructions;

4 a network connection device configured to provide connectivity to a network;

5 a central processing unit~~circuitry~~configured to execute instructions stored in the
6 memory to initiate a test of said network protocol stack, the test simulating communica-
7 tion between a plurality of devices using said network protocol, by emulating at least
8 some of the plurality of devices;

9 an input/output (I/O) device ~~circuitry~~ configured to receive a command compris-
10 ~~ing code~~ to modify one of ~~said~~ plurality of protocols in ~~said~~ protocol stack of ~~said net-~~
11 ~~work protocol~~; and
12 a central processing unit ~~circuitry~~ further configured to perform said modification
13 on said one of said plurality of protocols in said protocol stack while the test is executing
14 by changing a data structure corresponding to said one of said plurality of protocols in
15 said protocol stack.

1 23. (ORIGINAL) The apparatus of claim 22 wherein said command is received in inter-
2 preted code.

1 24. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2 the central processing unit further ~~circuitry~~ configured to determine said one of
3 said plurality of protocols in said stack to modify responsive to receiving said command.

1 25. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2 the central processing unit further ~~circuitry~~ configured to determine whether said
3 command is adding a message to said one of said plurality of protocols; and

4 the central processing unit further ~~circuitry~~ configured to add said message to said
5 one of said plurality of protocols.

1 26. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2 the central processing unit further ~~circuitry~~ configured to determine whether said
3 command is to remove a message from said one of said plurality of protocols; and

4 the central processing unit further ~~circuitry~~ configured to remove said message
5 from said protocol.

1 27. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2 the central processing unit further ~~circuitry~~ configured to determine whether said
3 command is to modify an existing message in said one of said plurality of protocols;

4 the central processing unit further ~~circuitry~~ configured to remove said existing
5 message from said one of said plurality of protocols; and

6 the central processing unit further ~~circuitry~~ configured to add a new message to
7 said one of said plurality of protocols including said existing message with modifications
8 in said command.

1 28. (CURRENTLY AMENDED) The apparatus of claim 22 further comprising:

2 the central processing unit further ~~circuitry~~ configured to determine whether said
3 command is to modify a state machine of said one of said plurality of protocols; and

4 the central processing unit further ~~circuitry~~ configured to modify said state ma-
5 chine of said one of said plurality of protocols responsive to said command.

1 29. (NEW) The method of claim 1 wherein said performing said modification while the
2 test is executing performs the test absent recompilation of said network protocol stack or
3 restart of the test.

1 30. (NEW) The apparatus of claim 22 wherein the central processing unit is configured to
2 perform said modification while the test is executing absent recompilation of said net-
3 work protocol stack or restart of the test.